b.) Remarks

Claims 1, 3-18, 24 and 51-53 are rejected under 35 U.S.C. §112, first and second paragraphs, as being indefinite for failing to particularly point out and distinctly claim the present invention and as not being supported by an enabling disclosure. In response, claim 1 has been amended in conformity with the Examiner's kind suggestion. As to claims 51-53, none recite "derived", nor does antecedent claim 2.

Claims 1, 3, 12-18, 24 and 53 are rejected as being anticipated by Ge et al. (*J. Biol. Chem.* Vol. 272 (34):21357-21363, August 1997) and by Lowe (*J. Biol. Chem.* Vol. 266 (26):17467-17477, Sept. 1991) . The Examiner states that this rejection may be overcome by amending the claim to specify that the polypeptide is obtained from mouse or human cells, or by submitting evidence that Ge's *Helicobacter* enzyme functions as described in Ge's patent publication. Accordingly, this rejection is overcome by the foregoing amendment.

As to Lowe, the Examiner states that "derived form" does not limit the number of changes permitted and so there is no reason to think Lowe's enzyme would not function as Applicants'. That is, the Examiner is requiring submission of evidence that the pending claims do not read on Lowe's disclosure. However, that evidence is already of record.

Table 1 on specification page 78 of the present shows the substrate specificity of mouse Fuc-TIV, which is the counterpart of human α-1,3-fucose transferase (referred to human Fuc-TIV) disclosed in Lowe (*J. Biol. Chem.* Vol. 266 (26):17467-17477, Sept. 1991) (hereinafter referred to as "Lowe 1"). The fact that human Fuc-TIV is the counterpart of mouse Fuc-TIV is clearly described in the abstract and page 25048, left column lines 7-10 of Lowe (*J. Biol. Chem.*, 270 (42):25047-25056 (1995) (hereinafter referred to as Lowe 2).[1]

1/The Examiner noted that the cited reference, Lowe 1, has no page 25048 and so accorded Applicants' arguments no weight. However, Applicants' arguments pertained to Lowe 2, a copy of which was enclosed with their June 3, 2003 Amendment. For the Examiner's convenience, a second copy of Lowe 2 is attached. (Note that Lowe is the last-named investigator; the first-named investigator is Gersten.)

As shown in Table 1, mouse Fuc-TIV has an activity to produce a sugar chain having NeuAc α2-3Galβ 1-4GlcNAc (Fuc α1-3) structure existing in a nonreducing terminus using a sugar chain having NeuAc α2-3Galβ1-4GlcNAc structure existing in a nonreducing terminus (α 2,3-sialyl LNn in Table 1) as a substrate. That is to say, mouse Fuc-TIV has an activity to transfer fucose to N-acetylglucosamine residue in an α 2,3-sialyl N-acetylglucosamine structure existing in a nonreducing terminus of a sugar chain via an α 1,3-linkage. Those of ordinary still in this art, therefore, readily understand that human Fuc-TIV has the same activity.

The polypeptide of claim 1 also has an activity to transfer fucose to N-acetylglucosamine residue in an N-acetylglucosamine structure existing in a nonreducing terminus of a sugar chain via an α 1,3-linkage. However, the polypeptide of claim 1 does not have an activity to transfer fucose to an N-acetylglucosamine residue in an α 2,3-sialyl N-acetylglucosamine structure existing in a nonreducing terminus of a sugar chain via an α 1,3-linkage.

Claims 1-9, 12, 17-18, 24 and 51-53 are rejected as anticipated by Kaneko et al. (*J. Biol. Chem.* Vol. 272 (34):21357-21363, August 1997) or Kudo et al. (*JBC*, October 1998, Vol. 273:26729-38) and claims 10-11 and 13-16 are rejected as unpatentable under 35 U.S.C. § 103 as obvious over either Kudo or Kaneko.

As understood, the citation to Kaneko (*J. Biol. Chem.*, Vol. 272(34): 21357-21363; August 1997) provided by the Examiner does not seem to be correct; it is thought the actual citation is Kaneko (*FEBS.Letters*, Vol. 452(1999), pages 237-242). (If the Examiner did intent to cite J.B.C. 272(34), he is respectfully requested to provided Applicants with a copy of it; they have none.)

This application is a PCT application filed July 29, 1999 that claims benefit of priority based on Japanese Patent Application No. 10-213823 filed July 29, 1998. Kaneko was published on June 11, 1999, as described on page 2 thereof. Kudo was published on October 9, 1998, as described on the front cover thereof. It is apparent that both of the references were published after the priority date of the present application.

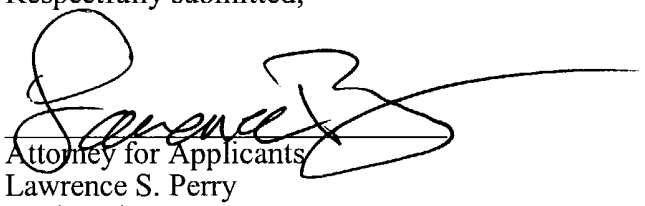
Accordingly, Applicants are currently preparing a sworn translation of Japanese Patent Application No. 10-213823. That document will be filed herein as quickly as possible. If the Examiner should reach this case for action before the sworn translation is placed of record, he is respectfully requested to telephone the undersigned.

In view of the above amendments and remarks, Applicants submit that all of the Examiner's concerns are now overcome and the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 1-75 remain presented for continued prosecution.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants
Lawrence S. Perry
Registration No. 31,865

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 408023v1